## Business Activity in New Mexico

Index of Business Activity ( $1947-49=100$ )

* Sales of Retail Stores ( 1,000 's)

Apparel Stores
Automotive Dealers
Subsistence Stores
Furniture and Appliance Stores
Building Materials Dealers Other Retail Stores
*Sales of Amusement Establishments (1,000's)

* Sales of Service Establishments (1,000's)
*Sales of Contractors ( 1,000 's)
* Sales of Wholesalers ( 1,000 's)
* Public Utilities' and Carriers' Sales ( 1,000 's)
* Manufacturers' and Processors' Sales ( $1,000^{\prime} \mathrm{s}$ )
* Life Insurance Sales ( 1,000 's)
* Bank Debits, 36 banks ( 1,000 's)

Bank Loans and Discounts, 36 banks ( 1,000 's)
Demand Deposits, 36 banks ( $1,000^{\prime} \mathrm{s}$ )
Time Deposits, 36 banks ( 1,000 's)
Business Failure Liabilities ( 1,000 's) ${ }^{\text {b }}$ Postal Receipts
Number of Workers in Nonagricultural Establishments in Manufacturing
in Mining
in Transportation and Utilities
in Financ
in Finance, Insurance and Real Estate in Services and Miscellaneous
in Government
in Contract Construction

* Building Permits, total 15 cities ( 1,000 's) Residential Nonresidential Other
*Petroleum Production (1,000's of bbls) Natural Gas Production (millions of cu ft )
Electric Power Production ( 1,000 's of kwh 's)
*Index of Total Metallics Production (1947-49 = 100)
Mine Production - Copper ( 1,000 's of lbs )
Mine Production - Lead ( 1,000 's of lbs )
Mine Production - Zinc ( 1,000 's of lbs )
* Mine Production - Potash (1,000's of tons

Index of All Farm Prices (1947-49 = 100) Index of Livestock Prices Index of Crop Prices
Receipts from All Farm Marketings (1,000's) Livestock and Products Crops

Bank Debits, 36 banks (1, $000^{\prime} \mathrm{s}$ )
Bank Loans and Discounts, 36 banks ( $1,000^{\prime} \mathrm{s}$ )
Bank Loans and Discounts, 36 banks
Demand Deposits, 36 banks ( $1,000^{\prime}$ )
Time Deposits, 36 banks ( 1,000 's)
Postal Receipts
Building Permits, total 15 cities ( 1,000 's) Residential Nonresidential
Other
Index of All Farm Prices (1947-49 = 100) Index of Livestock Prices Index of Crop Prices
*Indexes for these items are used to compute the Index of Business Activity.
${ }^{\text {a }}$ Although the number of reporting units changes, the indexes for these items are comparable with indexes for preceding months.
${ }^{\mathrm{b}}$ The figures in this series are based on the average of three month's data.
${ }^{r}$ These figures are revised, from those previously published, on the basis of more complete data.
${ }^{\text {na }}$ Not available
Sources:
Retail Sales data: N, M. Bureau of Revenue
Potash Production: N. M. Bureau of Revenue
Petroleum and Natural Gas Production: N. M. Oil Conservation Commission
Life Insurance Sales (New Ordinary): Life Insurance Agency Management Association
Wage Employment (all categories): N. M. Employment
Electric Power Production: Federal Power Commisaion Metallics Production: U. S. Bureau of Mines
Farm Prices and Marketings: U. S. Agricultural Marketing Service
Bank data (all series), Postal Receipts, Building Permits Bureau of Business Research Security Commission

## How To Understand and Use the Statistical Page

To some of our readers the big statistical table "Business Activity in New Mexico" looks like a statistician's nightmare. It really isn't. To those who know how to use it, the table tells a most vital and interesting story--what's happening to business in New Mexico. True, the story is told in figures that are all thrown into one big table. The reason for this treatment is that the happenings in the business world can be most readily and accurately measured and expressed in terms of figures. The tabular form makes it possible to present these quantitative facts about business in a concise and orderly manner, so that one set of facts (such as changes in the volume of retail sales) can be readily compared with a related set of facts (such as changes in the volume of bank debits).

## What the Statistical Series Show

The purpose of the table "Business Activity in New Mexico" is to present the most recently available figures which measure the volume of and changes in the activities of each of the state's major industry groups. Each of these sets of figures showing number of workers, value of sales, volume of production, and so forth is called a "statistical series." The names of these series appear in the extreme left-hand column of the table as "stub items," most of which also indicate the kind or size of units in which the series is measured.

The five figures following each stub item tell the reader five things about each statistical series: (1) the actual volume of activity for the current month (most recent for which data are available) expressed in dollars or tons or the particular unit indicated in the stub item; (2) the actual volume of activity for the corresponding month a year earlier; (3) the percentage by which the volume of activity in the current month differs from that in the month just preceding it; (4) the percentage by which the volume of activity in the current month differs from that in the same month a year' earlier; and (5) the way in which the current month's volume compares with that in the "base period" of 1947-49.

## Index Numbers

The figure which makes possible the lastmentioned comparison is called an "index number" and is merely an easy device for comparing the
volume of activity in any given month with the volume at some selected time called a "base period." This base period is an arbitrarily designated time by which it is convenient to measure changes which have occurred both before and after the selected period. The Bureau uses the 36 months from January 1947 through December 1949 as a base period, because most statistical agencies use it for their index numbers.

An index number is obtained simply by comparing the current month's volume of activity with the volume of the base period (in our case, the average monthly volume through 1947-49). If the current month's figure is exactly equal to the monthly average of $1947-49$, then the index number for the current month is 100.0 . This is the same as saying that it is 100 per cent of the base period. If the current month's figure is 20 per cent larger than the monthly average of 1947-49, then the index number for the current month is 120.0 (or 120 per cent of the base period). If the current month's figure is 15.6 per cent larger than in the base period, its index number is 115.6 . If the month's figure is 150 per cent larger ( $11 / 2$ times larger or $21 / 2$ times as large), then its index number is 250.0 .

Index numbers serve another purpose:' they enable us to compare changes in things which are measured in different units or are greatly different in magnitude. Thus we can compare the growth of retail sales (measured in dollars) with the growth of employment in trade (measured in numbers of workers). The index number for Sales of Retail Stores in August is 208.6, and the index number for the Number of Workers in Trade is 155.2. Therefore, we know that while sales volume has increased 5.2 per cent, employment has increased only 0.9 per cent.

Or we can compare the growth of retail sales in New Mexico with that in the United States, even though the volume of sales is vastly different. The nation's August sales were $\$ 17,490,000,000$, whereas the state's were $\$ 102,606,000$. The index number for the nation's retail volume was 165.3 as compared with an index of 208.6 for New Mexico's. Therefore, we know that while the nation's retail trade gained 65.3 per cent from the 1947-49 period, New Mexico's gained 108.6 per cent.

## Reading the Figures

Having looked at the purpose and framework of the table, let's see if we can interpret its con-
tents. Take the second stubitem as an example-the series called Sales of Retail Stores. The item in parentheses in the stub tells us that the figures in the first and second column should be read as thousands. So we find that the volume of sales of New Mexico's retail stores in August 1957 was $\$ 102,606,000$ and that in August 1956 it was $\$ 91,068,000$. The figure in the third column tells that sales in August 1957 were 5.2 per cent larger than in July 1957. The figure in the fourth column indicates that retail sales were 12.7 per cent larger than during the previous August. The figure in the fifth column is the index number which compares the volume of sales in August 1957 with the volume of sales in the average month of 1947-49. It shows that sales in the current month were 208.6 per cent as big as, or 108.6 per cent larger than, the base period average.

If we want to know what happened to bank loans and discounts (the amount of money loaned by commercial banks) during the period, we look at the seventeenth item in the stub column. We note first that the figures in the columns opposite "Bank Loans and Discounts" refer only to 36 banks and that the figures are given in thousands. Thus we read that the volume of loans and discounts made by 36 banks in August 1957 was $\$ 31,654,000$, and the volume for August 1956 was $\$ 31,905,000$. We also learn by examining the third, fourth, and fifth columns that August's volume of bank loans was 12.3 per cent smaller than July's and 0.8 per cent smaller than the previous August's. The index number of 189.6 indicates that the August ' 57 volume was 189.6 per cent of the average monthly volume in 194749 , or 89.6 per cent larger than it was then.

## How Current Are the Figures?

Most of the figures in the table on Page 2 of this issue refer to the volume of business activity for August 1957. Since most readers will not see these data until mid-November, they may ask, "Why aren't the figures more recent?" The delay in publishing the figures results from delays in receiving them from the various agencies which assemble the data from reports submitted by business establishments. Some of the reports need not be filed until the end of the month follow ing that in which the transactions occur. The agencies which collect these reports may take a month or six weeks to consolidate them into the single report which each one sends to the Bureau.

The Bureau, therefore, cannot in turn consolidate these reports into a composite picture of business in the state until statistics from the slowest agencies have arrived. After the last report is in, the Bureau can complete calcula-
tions of changes and of index numbers and prepare its consolidated report of business activity within about three days. Within another three or four days the data have been printed and are in the mail.

While this delay does not impair the usefulness of the information, the Bureau recognizes that users would like it to be more recent. Therefore, the lower portion of the statistical table contains information which we are able to get and compile more quickly than we can the majority of the figures. The earlier figures for these more current statistical series are also carried in the upper portion of the table, so that they may be compared with other measures of activity for the same month.

## The Footnotes

Most of the footnotes on the statistical page simply give the sources of the data--the agencies or institutions from which the Bureau of Business Research obtains the basic information. Footnote "a" means that since some reporters for the various series are late reporting, the figures that are on time must be adjusted to make the index numbers comparable with those for previous months. The " b " footnote indicates that the published figure is based on an average of three months' data. We use the average because we believe that it is a better indication of the trend of business failures. The " $r$ " footnote indicates that the figures differ from those previously published because they have been revised on the basis of more recent information.

## Using the Figures

You might well ask what these figures can be used for. The answer depends upon your interests. If you want to know whether the fluctuations in sales or production of your own business reflect some special internal condition or are merely following the general course of business or the trends typical of the trade you're in, you can use the figures to compare the performance of your business with that of others in the state. For example, suppose you operate a men's clothing store and your August sales were $\$ 8,625.78$ compared with $\$ 9,214.18$ in July and $\$ 8,892.80$ in August 1956. You wonder whether the drop in your business of 6.4 per cent from July ( 3 per cent from August 1956) is due to causes within your own organization or follows from a general slackening of retail trade or business in general. By checking the statistical table on Page 2 you find that the Index of Business Activity for August is up 6.1 per cent from July and 16.2 per cent from August 1956. So you conclude that your business didn't do as well as business activity
in general indicates it should have.
But it occurs to you that the apparel business may not have followed the same course as general business activity. By looking at the statistical table you can determine that sales of apparel stores throughout the state gained 10 per cent from July to August and that August sales were 15.2 per cent above those of August 1956. So you are led to conclude that you didn't do as well as your competitors throughout the state. This fact suggests that you had better look for the reasons to see if you can remedy the situation.

Of course, you may feel that the drop in your own business was due to a localdecline in apparel sales. You can test this belief by examining the figures for apparel sales in your county in the table on Page 7 of this issue and comparing them with figures on Page 9 of last month's issue to see whether they increased or decreased and how much. Or for a comparison of August's sales with those of a year earlier, you get out your file of NEW MEXICO BUSINESS and consult the table on Page 7 of the October 1956 issue. If you don't have the back issues, you can write to the Bureau here at the University, and you will receive last year's figures promptly.

If you are interested in following the course of economic development in the state, you can find much of the information you need in the statistical table. The index numbers are particularly helpful for this purpose, for they tell you at a glance what growth has occurred in employment, production, or sales in the state's principal industries. The index number of 157.3 for the statistical series Number of Workers in Nonagricultural Establishments tells you that nonagricultural wage employment in New Mexico in August wąs 57. 3 per cent larger than it averaged during 194749. Similarly, the index number of 292.8 for Electric Power Production tells you that this important contributor to economic growth was 192.8 per cent larger than in 1947-49.

There are many other uses for the figures, of which the examples given above are only suggestive. Business managers, sales executives, public officials, and all those whose activities are affected by the changing course of business in New Mexico can find the answers to many of their everyday questions by consulting the figures published each month in this bulletin under the heading "Business Activity in New Mexico."
--R. L.E.

## Notes on Weather, Sales, and Welfare

## When It Rains, It Pours!

Whether it was sun spots or advance atmospheric apprehension about Sputnik, the skies over the Land of Enchantment opened up in August, and the rains came--in many cases, spectacularly. The month was one of the five wettest in all the 66 years since climatological records have been kept for New Mexico.

On Aug. 4, Las Vegas and the mountains nearby were hit by a storm that washed out three smalldams, wrought havoc with highway bridges, and left lowlands inundated. Two persons who were attempting to cross a flooded arroyo were drowned.

On Aug. 6, Lordsburg got a taste of the same kind of weather, with streets, lawns, highways, and some buildings being damaged by rampaging rains. Two weeks later, on Aug. 17, Santa Fe was hit on the east side by another torrential rainstorm. Streets, bridges, some homes, and a few business buildings were damaged.

On the 25th, a flash flood hit Winston, when an estimated five inches of rain descended. Several homes had to be bailed out. On the same day, in an adjoining county a car overturned in a flooded arroyo near Socorro, and a child was drowned. Four days later, three persons were killed in a highway collision near Alamogordo, with heavy rains being blamed for the accident. Also on the 29th, up north in Lyden, homes and gardens,
orchards and streets were badly battered, and irrigation and drainage ditches were destroyed.

Almost the entire state received heavy precipitation during the month. Streams ran high, wide and muddy, with excessive runoff in most of them. Reservoirs filled up, covering predicted points ongauges. But, paradoxically, some water levels declined. The dropping tables occurred in areas using ground water for irrigation, with the Berrendo and Dayton wells in the Roswell basin sinking to record lows.

When the rain came, crop conditions began to improve immediately and sharply. The supply of range feed was soon the best in many an August, except in some dry areas in eastern counties. Supplemental feeding was largely discontinued, and cattle generally gained weight. Wherever the soil was sufficiently moist, winter wheat began dropping into the ground. At the same time the south-central portion of the state suffered much damage to hay and slight damage to cotton.

Precipitation fell on the state's eight climatological divisions almost daily, with mean totals of rainfall for the month ranging from 111 per cent in the Northeastern Plains to 207 per cent in the Southern Desert. Many stations measured daily catches of more than 2 inches, with Lordsburg getting 2.75 on Aug. 6 and Winston getting nearly 2 inches on Aug. 25. Monthly totals great-
er than 7 inches were chalked up at places in the southwest, south-central, and central portions of the state--at 18 weather stations in all.

Stations receiving more than 7 inches were:

| Stations | County | $\underline{1857}$ | $\underline{1956}$ | Stations | County | 1957 | 1956 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| McCauley |  |  |  | Tererro | San Miguel | 7.77 | 1.42 |
| Ranch | Sierra | 10.88 | 3.12 | Dulce | Rio Arriba | 7.67 | 1.20 |
| Cowles | San Miguel | 9.20 | 1.80 | White Tail | Otero | 7.38 | 4. 38 |
| Gascon | Mora | 9.18 | 2.28 | Dilia | Guadalupe | 7.30 | 2.28 |
| Edgewood | Santa Fe | B. 16 | 1,84 | Tajique | Torrance | 7.28 | 1.60 |
| Jewett RS | Catron | 8.87 | 1.11 | Palma | Torrance | 7.26 | 1, 36 |
| Lordaburg | Hidaigo | B. 28 | 1.57 | Luma | Catron | 7.25 | -- |
| Loe Alamos | Los Alamo | 7.69 | 1.55 | Jemex Springs | Sandoval | 7.03 | 1.18 |
| Маур山 | Oters | 7.84 | 1.92 | Cloudcroft | Otero | 7.02 | 3.84 |
| Winston | Sierra | 7.80 | 1.52 |  |  |  |  |

## We Keep on Buying.

At the end of July, 19 New Mexico counties showed cumulative retail sales larger than those of the first seven months in '56. Some of the margins were quite wide, ranging from 1.3 per cent in Dona Ana to 32.5 per cent in San Juan. Sales in 12 counties were down from the corres ponding period last year, ranging from an 0.7 per cent drop in Santa Fe to 31 per cent in Catron. Union county sales showed no change.

Generally, business conditions throughout the state were better for the first seven months than during the same period in 1956. Bank debits were up 10.8 per cent; total retail sales were $\$ 678.8$ million compared with $\$ 631.1$ million last

| County | 1956 | $\underline{1957}$ | \% Change |
| :---: | :---: | :---: | :---: |
| Bernalillo | \$192,436 | 8182,074 | - 5.4 |
| Catron | 1,538 | 1.060 | -31.1 |
| Chaves | 36,904 | 38,008 | +3.0 |
| Colfax | 9, 060 | 8,905 | - 1.7 |
| Curry | 18, 372 | 19,321 | $+5.2$ |
| De Baca | 2, 307 | 2, 010 | -12.9 |
| Dona Ana | 24,785 | 25, 104 | $+1.3$ |
| Eddy | 40,678 | 38,294 | - 5.9 |
| Grant | 12,469 | 11,769 | -5. 6 |
| Guadalupe | 3,767 | 4, 231 | +12.3 |
| Harding | 839 | 860 | +2.5 |
| Hidalgo | 4, 021 | 3,976 | - 1.1 |
| Lea | 57,703 | 56,870 | - 1.4 |
| Lincoln | 4,443 | 4,369 | -1.7 |
| Los Alamos | 3,618 | 3, 994 | +10.3 |
| Luna | 7,680 | 7, 574 | - 1.4 |
| McKinley | 16,976 | 17,598 | $+3.7$ |
| Mora | 898 | 944 | $+5.1$ |
| Otero | 15,818 | 18,568 | +17.4 |
| Quay | 8,543 | 8,940 | +4.6 |
| Rio Arriba | 6,992 | 7, 391 | $+5.7$ |
| Rooseveit | 8, 000 | 8,655 | +8.2 |
| Sandoval | 2,670 | 3,102 | +16.2 |
| San Juan | 32, 328 | 42, 833 | +32.5 |
| San Miguel | 7,734 | 8, 424 | +8.9 |
| Santa Fe | 28, 875 | 28, 661 | -0.7 |
| Sierra | 3,534 | 3,483 | -1.4 |
| Socorro | 4,361 | 4, 881 | +11.9 |
| Taos | 4,628 | 4,930 | $+6.7$ |
| Torrance | 3, 251 | 3,599 | +10.7 |
| Union | 3,446 | 3,443 | 0.0 |
| Valencia | 11,519 | 13,133 | +14.0 |
| Unallocated | 40,080 | 70,312 | +75. 4 |
| State Total | \$620,074 | \$657, 325 | + 8.0 |

year. Employed workers in an average month during the first seven numbered 11, 672 more than the average for the January-to-August period in '56. However, despite these encouraging figures, after adjustment for typical seasonal fluctuations is made, we find that the number of our jobless workers in the state was slightly above normal.

Contractors' sales came to $\$ 177.1$ million in contrast to the $\$ 143.7$ million last year, and valuation of planned construction reached $\$ 37$ million for a period gain of more than $\$ 2$ million.

## We Give More Welfare Assistance.

Only three New Mexico counties had fewer recipients of state welfare aid during August 1957 than during August 1956. Six had increased their lists by 15 per cent or more; Harding had one fewer; Lincoln and Otero each had four fewer. Lea's increase--36.7 per cent--was the largest. Other substantial percentage increases included these: Torrance, 22.8; Chaves, 21.6; Sandoval, 16.5; Luna, 16.3; and Eddy, 15.4. The state's total was up 4,464 over year-ago figures.


Analysis of the record of expenditures for this last August shows the following distribution and the percentage each expenditure represents of the total outlay for the month of $\$ 1,586,021$ :

Public assistance, $\$ 1.3$ million--81.5 per cent against last year's 75.3 for the same month; service benefits, $\$ 34,117--2.2$ per cent against last year's 2.0 ; operation of welfare institutions, $\$ 37,329--2$. 3 per cent compared with 8.2 per cent in 1956; commodity distribution, \$19,569--1.2 per cent compared with 1.0 per cent last year; and capital outlay, \$4,906--0.3 per cent against the previous August's 0.8 per cent.
--M. I. M.

Monthly Summary (Continued from Page 1) autonnotive dealers bettered their August 1956 performance by a fat 18.2 per cent.

Compared with last year, only the subsistence group (restaurants, public lodgings, and food stores) and furniture and appliance stores failed to show substantial gains in August. Sales of the latter group have been declining steadily since July 1956 and since then have averaged less than 71 per cent of their year-earlier levels.

Nonagricultural wage employment also continued its steady growth in August; its yearly gain slightly exceeded its ten-year average of 5.3 per cent. The continuation of this steady growth, interrupted only in 1954, coupled with gains in average weekly earnings appears to insure high-level business activity in New Mexico for some time to come.

Largest gains in the number of wage workers over August 1956 were made in the service industries, and the largest contributors to this gain were the concerns offering specialized engineering services associated with the rapidly expanding electronics industry. The second largest rate of gain in employment came in the finance group. The gain in the number of construction workers was almost negligible, but the important fact is that there was a gain.

RETAIL SALES: A Comparison
PER CENT CHANGE: Auguat '57 from Auguat '56

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Sales Activity in New Mexico Counties


## CHART-OF-THE-MONTH

Volume 10. Number 10

Business activity for 1957's first half $\qquad$
$\qquad$ exceeded normal expectations,


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